

What is Claimed is:

1. A semiconductive glaze product comprising a glaze composition and a flux, the glaze composition containing a KNaO-MgO-CaO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-based base glaze in which the compositional proportions as represented by the Seger formula of basic components; i.e., KNaO, MgO, and CaO, are 0.1 to 0.4, 0.2 to 0.6, and balance, respectively, and containing a metal oxide composition including tin oxide and antimony oxide, wherein the amount of the flux is 10 parts by weight or less on the basis of 100 parts by weight of the glaze composition.

2. The semiconductive glaze product according to claim 1, wherein the flux is boron oxide.

3. The semiconductive glaze product according to claim 1 or 2, wherein the compositional proportions as represented by the Seger formula of Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub> constituting the base glaze are 0.5 to 0.9 and 4 to 7, respectively.

4. The semiconductive glaze product according to any one of claims 1 to 3, wherein the amounts of the base glaze and the metal oxide composition contained in the glaze composition are 60 to 80 wt.% and 40 to 20 wt.%, respectively.

5. The semiconductive glaze product according to any one of claims 1 to 4, wherein the antimony oxide content of the metal oxide composition is 2 to 15 wt.%.

6. The semiconductive glaze product according to any one of claims 1 to 5, wherein the metal oxide composition contains niobium oxide in an amount of 5 wt.% or less.

7. A method for producing a semiconductive glaze product

comprising mixing predetermined amounts of a flux and a glaze composition containing a base glaze and a metal oxide, the flux and the glaze composition serving as raw materials; and adding water to the resultant mixture to thereby form a slurry, wherein particles of the raw materials; i.e., the glaze composition and the flux, are reduced in size such that large particles having a size of at least 10  $\mu\text{m}$  account for 15 wt.% or less of the entirety of the particulate raw material mixture.

8. The method for producing a semiconductive glaze product according to claim 7, wherein wollastonite is employed as a Ca source.

9. A insulator comprising an insulator main body whose surface is coated with a semiconductive glaze product as recited in any one of claims 1 to 6.